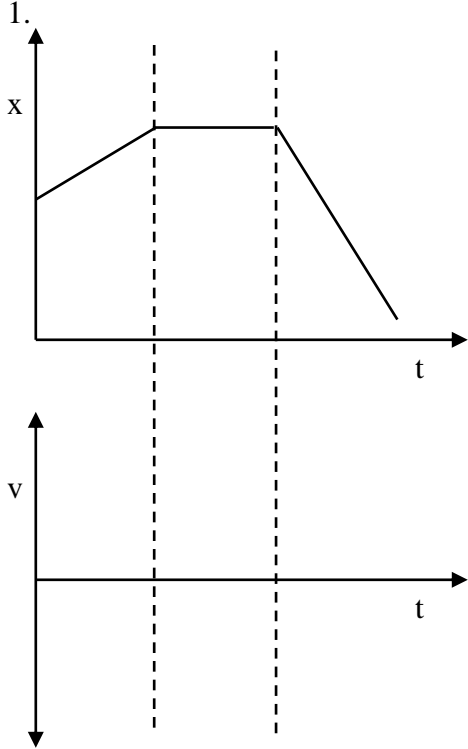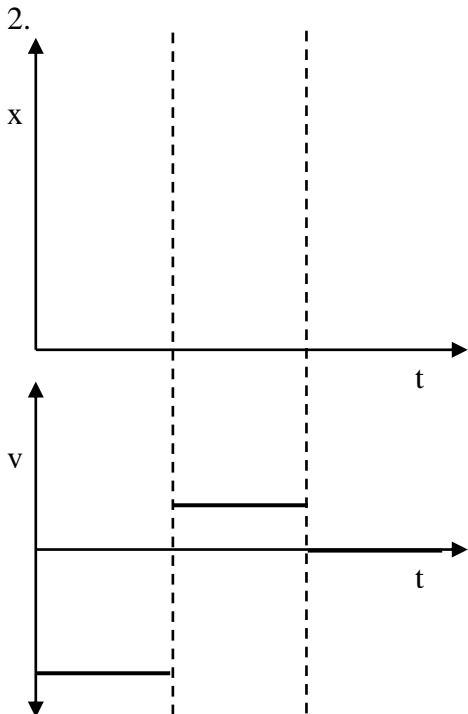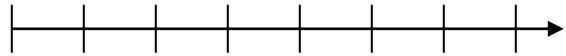## Constant Velocity Particle Model Worksheet 5:
Multiple Representations of Motion

Given one motion representation, supply the missing motion representations.
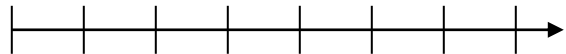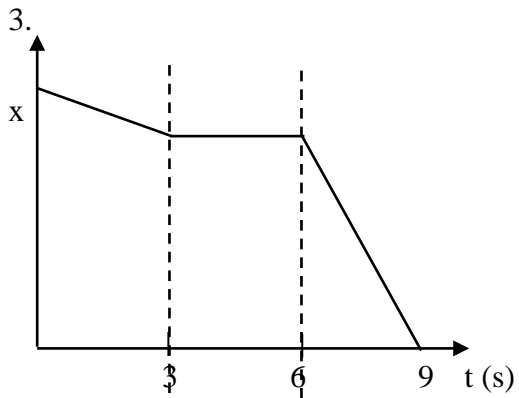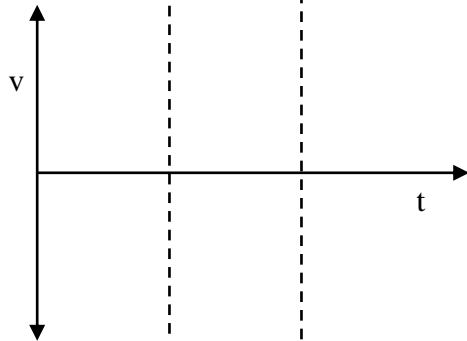
1.

Written description:

Motion map:

2.

Written description:

Motion map:

3.

x

3   6   9   t (s)

v

t

Written description:
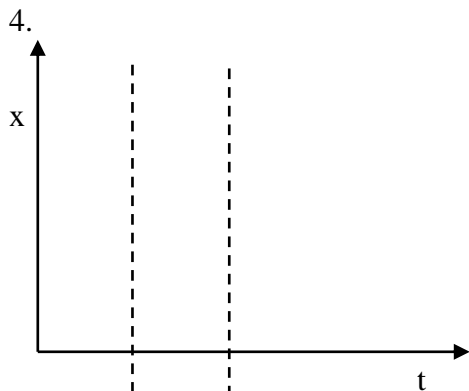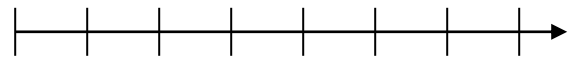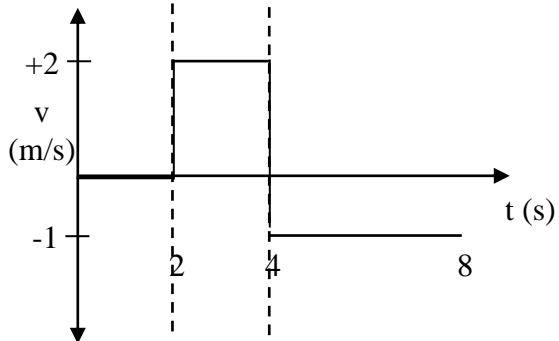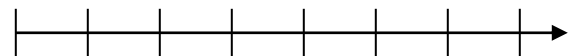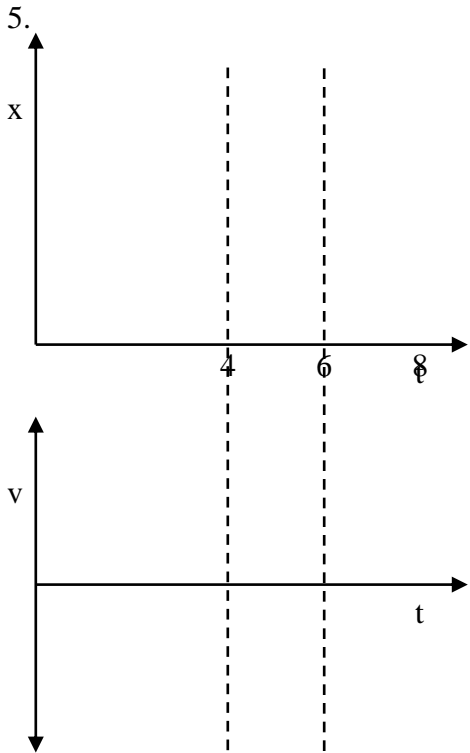
Motion map:

4.

x

t

+2

v
(m/s)

-1

2   4   8   t (s)

Written description:

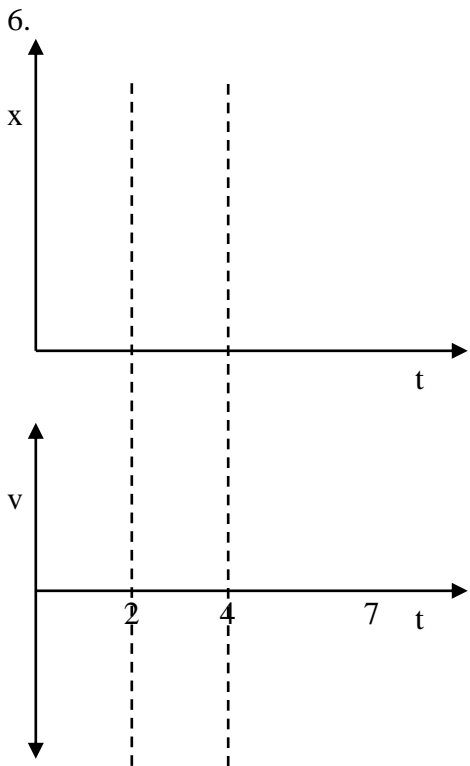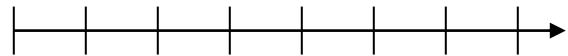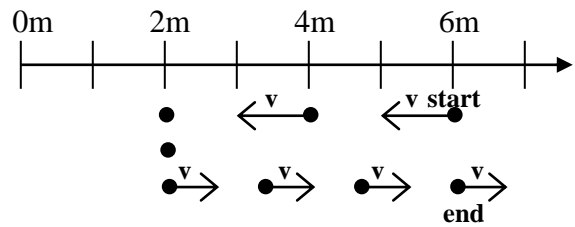Motion map:

5.

x

4   6   8

v

t

Written description:

Object moves with constant positive velocity for 4 seconds. Then, it stops for 2 seconds and returns to the initial position in 2 seconds.
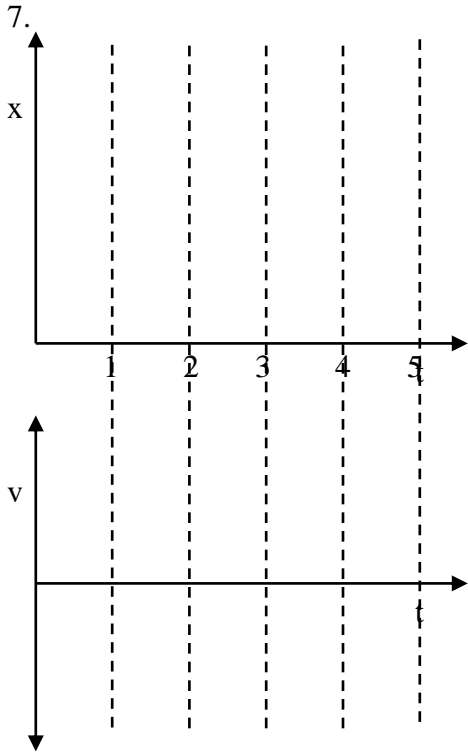
Motion map:

6.

x

t

v

2   4   7   t

Written description:

Motion map: Δt = 1 s

0m   2m   4m   6m

←v   ←v start

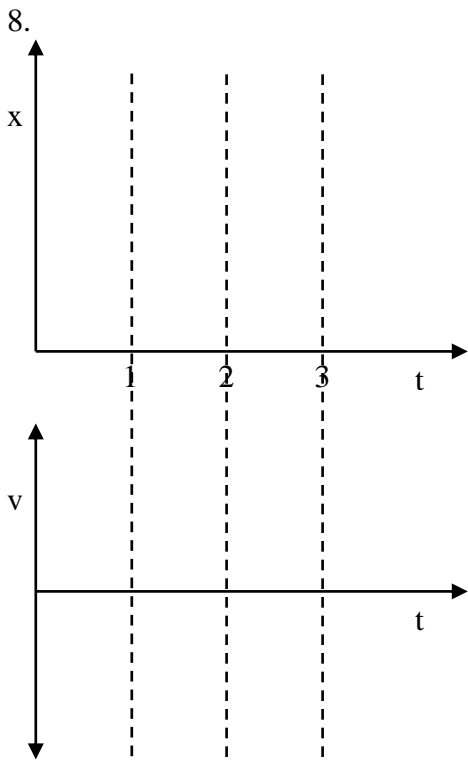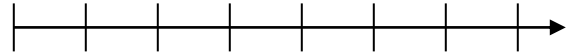v→   v→   v→   v→
                  end

7.

Written description:

Object A starts 10m to the right of the zero position and moves to the left at 2 m/s. Object B starts at the zero position and moves to the right at 3 m/s.

Motion map:

8.

Written description:

*Both objects begin moving at t = 0.

Motion map: Δt = 1s